

THIS IS THE NEW CARBIDE COAL-HYDROGENATION plant at Institute, W. Va. The lettering indicates the operations of various units and the arrows show the flow of process from raw materials to end products.

Why You Need Salt Tablets

By A. W. Robinson, M. D.

The question almost universally asked these days by nurses and doctors in the dispensary is "Are you taking your salt tablets?" And about the most commonly recommended treatment is "take salt tablets."

Why is this so? Because during long continued hot spells, people lose so much of the normal body salt in perspiration whether they realize it or not. If they do not take additional salt they become sick. This sickness is not necessarily severe enough to put one to bed or make one faint on the job—these are the more serious manifestations of heat sickness and usually are preceded for several days by other warning signs such as dull headaches, a feeling of constant tiredness, maybe slight nausea or dizziness, or cramps in various muscles of the body. Most of the upset stomachs we see are basically due to heat sickness rather than to bad food. But, if these early signs of heat sickness are disregarded, then in time the severe symptoms of fainting and complete prostration occur.

The best way we know to prevent the occurrence of this uncomfortable and sometimes dangerous illness is to take an adequate amount of salt. This varies from the extra salt tablets a day for the office worker, working in air conditioned buildings and exposed to the heat for shorter periods of the day, up to 8-10 a day for the man who is constantly wet with sweat so that at night his clothes are stiff and white with the salt lost in sweating. Such men should take a salt tablet or two with every drink of water.

Many people say "But salt tablets make me sick." The answer to that is that the old fashioned plain salt tablets did frequently cause vomiting if they happened to lodge in a fold of the stomach lining and

did not dissolve promptly. To prevent this, new types of salt tablets have been put into use—either a coated tablet—green or bright red or a pink impregnated salt tablet called "Pep-up Tablet." These do not dissolve until they reach the intestinal tract below the stomach and so do not cause vomiting.

With the exception of a few people with heart disease or kidney disease, salt is harmless and any excess amount taken is simply lost, so unless you have been told by your family doctor not to take salt for medical reasons, take salt tablets in hot weather. It will "pep you up."

GADGET 'SMELLS' MINERALS

According to the Canadian Press, Dr. F. B. Smyth, of Saskatchewan, has invented a "magical tin can" called an "emanation detector," it is said to "smell out" oil and mineral deposits such as coal and uranium.

Carbide Produces Chemicals by Coal Hydrogenation

"Production of chemicals by coal hydrogenation is now a reality," according to Dr. J. G. Davidson, President of Carbide and Carbon Chemicals Company, a Division of UCC, in announcing the successful operation of the Company's \$11,000,000 coal-hydrogenation chemicals plant at Institute, W. Va.

Carbide has long been one of the largest producers of aliphatic organic chemicals. Now, this announcement of the coal-hydrogenation operation marks the Company's first major venture into the aromatic chemicals field. However, chemicals from coal was not the primary objective of the research on the coal-hydrogenation project when it was started in 1935 by Dr. G. O. Curme, Jr., now Vice-President of Research, UCC.

More Than 100 Identified

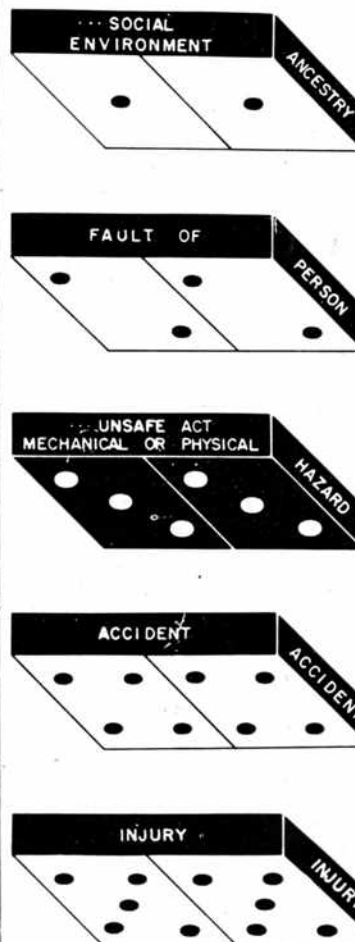
The company then believed that the days of economical natural or refinery gas—the basic raw materials for aliphatic organic chemicals—might be numbered. It was looking to coal as an alternative source for these gases. After years of research and development work on the hydrogenation process, the gases sought were successfully produced. In addition, the liquid hydrogenation product was rich in coal chemicals—so rich, in fact, that the research emphasis was shifted from gas production to the production of chemicals. Research continued and the present plant, with a capacity of 300 tons of coal a day, was built. More than 100 chemicals have been identified in the hydrogenation process—many commercially recoverable.

The process itself is not new. It was discovered by a German chemist as early as 1913, and the Germans later used it, at costs quite intolerable in American economy, to make synthetic motor fuels. However, Carbide's concept of using it solely for the production of chemicals is new.

Fears Can Be Allayed

It might be possible to place the entire synthetic chemical industry on a raw-material basis, if that ever becomes necessary. This will help allay the fears of those who

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THE FIVE FACTORS IN an accident sequence—Cause of an accident is graphically illustrated by the domino sequence pictured above. By removing unsafe mechanical or physical condition to prevent an accident, we can break the sequence and, therefore, eliminate the accident which in some cases results in an injury. The above chart was taken from a text book on accident prevention by Heinrich which is used by the Y-12 Safety Department.

Carbide Wives Set Next Wednesday for Meeting

The Carbide Wives will hold their monthly card party meeting next Wednesday evening, July 16, at 7:30 p. m. in the East Lounge of Ridge Recreation Hall. Bridge and canasta will be played, and refreshments will be served.

Mrs. S. M. DeCamp is the executive member in charge for the evening.

Safety Dept. Defines What Is Lost Time Injury

An increasing amount of thought, study and attention is being devoted to the promotion of safe working conditions and practices throughout Union Carbide and Carbon Corporation and its Divisions. That is particularly true of Carbide here at Oak Ridge where it is so vital that work continues with as little interruption as possible because, to some great degree, national security depends upon what is being done here.

Much plant newspaper publicity and direct information bears on the subject of safety and the three Plants here have benefited thereby to an extent that Y-12, ORNL and K-25 employees have, by their co-operation, built up enviable safety records in the Carbide and Carbon Chemicals Company.

The Y-12 Safety Department, believing that simplicity of information is the most understandable, gives a refreshing answer to a simple, yet thoroughly fundamental question to "What is an Accident?"

An accident may be defined as any occurrence that interrupts or interferes with the orderly progress of the activity in question. Some accidents involve human injuries, but a lot of them do not.

For instance, a hoisting chain may break, dropping a load of steel bars to the floor. Because everyone was out of the way, no one was hurt. This is an accident but not an injury.

In case an injury is incurred the most important thing to do is to report for medical infection preventive treatment in preference to expensive neglect and suffering, regardless of how slight the injury may be. An employee under no circumstance should exercise his opinion as to whether or not the injury requires medical attention; he should, as stated before, always follow the safe procedure of reporting the injury no matter how slight. However, the best course to follow is the safe one—work safely and prevent accidents.

Two disabling (Chargeable Lost Time) injuries have occurred this year due to delayed reporting for medical treatment. There have also been other non-chargeable lost time injuries which have occurred this year due to the same reason. Non-chargeable meaning that investigation revealed that these cases did not meet all the requirements due to some technicality of the standards of determining chargeability.

Safety records are good, and several good records have been established here in this plant. However, congratulating ourselves for the good record of yesterday will not be very much help in preventing accidents, which in some cases cause human suffering tomorrow. Elimination of human suffering is of most importance. This can be done by preventing accidents. There will never be a minute, an hour, or a day when we can relax our vigilance in preventing accidents.

Let's set a new target and go back to our work place and do something about making this still a safer place in which to work.



SIGNING OF THE CONTRACT BETWEEN Y-12 AND THE ATOMIC TRADES AND LABOR Council, A. F. of L.—The contract extends for two years from July 1, 1952, and contains two wage reopening periods. Counter clockwise, beginning with the man first to the left from the center post, the men around the conference table are: Charlie Elder, A. T. & L. President Fred Henry, Joe Wilson, W. H. Haun, B. A. Clark, Jess Hanson, Roy Johnson, J. L. Crawford, R. Y. Drumwright, Bessie Martin, Paul Pennington, John Shugart, C. J. Mitchell, W. A. Rutherford, Jesse Durrett, Edd Quilliams, and P. L. Patrick, R. B. Amos, all of the Atomic Trades and Labor Council; L. B. Emlet, Y-12 Plant Superintendent; H. O. Ramey, retiring Superintendent of Industrial Relations; G. W. Flack, new Superintendent of Industrial Relations; and F. C. Lowry, Personnel Superintendent.

SAFETY SCOREBOARD

Your Plant Has Operated

73 Days

Without A Lost Time Accident

Through July 7

The Bulletin

Published Weekly By And For
Y-12 Employees Of
CARBIDE AND CARBON
CHEMICALS COMPANY
A Division Of
Union Carbide And Carbon
Corporation
Post Office Box P
Oak Ridge Tenn.

GEORGE W. DOBBS . . . Editor

OFFICE

North Portal Bldg. 9701-1
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Attendance Record

(More Than 50 Employees Scheduled)

MAJOR LEAGUE More Than 50 Employees Scheduled				
Dept.	Absent	6-29-52	6-22-52	Standing
2060	0.4	1	5	
2619	0.8	2	2	
2739	1.3	3	1	
2008	1.9	4	11	
2618	1.95	5	10	
2003	1.97	6	7	
2018	2.01	7	13	
2014	2.2	8	16	
2142	2.6	9	3	
2091	2.8	10	8	
2015	3.0	11	12	
2790	3.15	12	6	
2617	3.23	13	4	
2077	3.5	14	9	
2773	3.8	15	15	
2001	3.9	16	14	

Group absentee percentage was 2.5 per cent, .1 per cent lower than the preceding week.

MINOR LEAGUE 15-49 Employees Scheduled				
Dept.	Absent	6-29-52	6-22-52	Standing
2200	0.0	1	1	
2064	0.0	1	2	
2743	0.0	1	4	
2144	0.0	1	5	
2109	0.0	1	8	
2005	0.4	2	3	
2145	0.6	3	3	
2046	0.8	4	11	
2133	1.0	5	9	
2093	1.2	6	1	
2108	1.3	7	6	
2616	1.6	8	12	
2090	3.4	9	14	
2107	3.6	10	10	
2002	4.5	11	13	
2096	4.7	12	7	
2143	7.1	13	15	

Group absentee percentage was 2.0 per cent, .2 per cent lower than the preceding week.

The plant average for the week ending June 29, was 2.4 per cent, .1 per cent lower than the preceding week.



Baby Girl: Father, **Charles R. Harris**, Manufacturing Offices Dept., June 27.

Baby Boy: Father, **Joseph E. Lee**, Analytical Chemistry Division, June 29.

Local ACS Section Plans Big Ridge Park Picnic

The East Tennessee Section of the American Chemical Society will give a picnic at Big Ridge Park on Saturday, July 26. Chemical Society members, their families, and guests will enjoy a program of planned recreation and entertainment preceding the 5 p.m. picnic supper.

A letter of invitation giving full particulars will be mailed to each member of the section, according to Roberta McCutchin, publicity chairman. In case of rain, the outing will be held the following day.

Women Drivers Declared 'Not So Dumb' After All

According to International News Service, all those bromides about women drivers ignore some important statistics. Carol Lane, women's travel director for a national oil company, has pointed out that statistically, women hold one-third of the driving licenses issued in the United States—and plan four out of five vacation trips for their families.



E. A. Hauther, of the Manufacturing Offices, and **Richard Humphrey** are both vacationing this week at their respective homes in Knoxville. . . . **H. P. Rice, Jr.**, and his family are visiting relatives in Virginia, while on vacation this week. . . . Congratulations to **Charles A. Harris**, who is the father of a baby girl born June 27, at the Oak Ridge Hospital.

W. H. Russell, of Research Engineering, and his wife are seeing the sights in Panama City, Fla., while on a week of vacation. . . . **G. E. Isham** is on vacation this week at his home in Emory Gap, Tenn.

Penny Keene, of Medical, and her husband, **Oliver**, of Property, with their week end guests, Penny's sister and brother-in-law from Atlanta, Ga., journeyed over to Cherokee, N. C., to see "Unto These Hills," one evening over the week end.

Helen Sisson, of the General Maintenance Offices, is vacationing this week to entertain her sister and brother-in-law who are visiting from Ohio. . . . **Steve Porter** and his family are vacationing in Miami, Fla., this week.

W. A. Parks, of Building and Grounds, and his wife, **Nell**, of Superintendents Department, are visiting their son at the Otis Air Force Base in Falmouth, Mass., while on a two-week vacation—they also plan to make a trip to Cape Cod, while in Mass. . . . **C. B. Hopkins** and his wife are visiting their son in Wisconsin, while vacationing for two weeks. . . . **J. F. Colbert** and his family reported the water was fine last week at Daytona Beach, Fla., and expect to enjoy it just as much this week which winds up their two-week vacation period. . . . **Bob Martin** and his family visited in Mississippi and Louisiana while on a week of vacation. . . . The department extends sympathy to **C. L. Newcomb** at the recent death of his father.

C. W. Mason, of Research Services, and his family visited relatives in Alabama, on last week's vacation.

Lt. E. M. Hunnicutt, of the Guard Department, his wife and son visited Mrs. Hunnicutt's sister in Willinton, S. C., on a recent week end. . . . **Lt. George May** covered

lots of territory on his recent vacation—Marshall, Tex., was one of the many places he and the family visited.

Most hearty congratulations go to **Joseph E. Lee**, of the Analytical Chemistry Division, who is the proud father of a baby boy—the Lees already have three girls—born June 29, at the Oak Ridge Hospital. . . . **Virginia Smith** and her husband, **Guy**, of the Chemical Department, are spending a two-week vacation in Florida. . . . A welcome is extended to **Shirley E. Weindl**, who is the newest addition to the department.

The Chemical Department extends congratulations to **Warren Ratledge**, who is the proud papa of a baby girl born June 28, at Lenoir City. . . . Also congratulations are extended to **Roy Williams**, who is the father of a baby boy born June 17, at the Oak Ridge Hospital.

Eva Williams, of Stores, and her husband, **Paul**, of the Analytical Chemistry Division, visited relatives in Akron, O., over the week end.

Margaret Jenkins and **Mozelle Rankin**, of Electromagnetic Research, are vacationing this week—they drove down to Miami, Fla., last Thursday evening—from there they plan to fly over to Cuba for a few days.

Floyd Ludwig, of Maintenance Shops, and his family are spending two weeks of vacation with his folks in Denver, Col. . . . **Bill Forrester** and his family spent last week's vacation in West Virginia.

. . . **Ed Harris** and family are on a two-week vacation tour through Virginia and ending up at Virginia Beach. . . . **E. C. Stinnett** and his family spent last week at Daytona Beach, Fla. . . . **J. R. Ayres** and his family also vacationed at Daytona Beach last week. . . . **Bill Bufinton** has returned from a profitable week-end vacation—selling watermelons at the over-look in our fair city. . . . **Willie B. Tyree** and his family are on a two-week vacation tour of the West. . . . **C. P. McLemore** and family are vacationing in Florida this week.

. . . **G. W. Brewer** reported a fine time on his recent vacation trip of Florida despite the fact he fell asleep on the beach and came back looking like the proverbial lobster.



Y-12ERS IN BLDG. 9704-1 HAD A LOT OF FUN UP AT BIG Ridge Park on a recent picnic. At top, walking, with white dress is Pauline Harmon, then come Eunice Webster, Bill Miller and Bill Cottrell, all seated. At left are the families of Bill Cottrell and Melvin Laverne. Seated around the table at bottom, from left are Anne Forbes, Anne Morris, Jim Tsigoulis, Marina Tsigoulis, Ernest Akenberry, Bill Weaver and Rooney Weaver.



William G. Biggers, Carl T. Sutton, Electrical Maintenance; Eugene S. French, Administrative Normal; William T. Burgess, Field Maintenance; Ernest T. Wallace, Buildings and Grounds; George M. Banic, Jr., Isotope Research and Production; Emil W. Osborne, Administrative Product.

Florida way vacationing last week. . . . **C. R. McGinnis** was also down last week camping somewhere near Kentucky. . . . **C. H. Drummond** went down to Alabama for his week off. . . . **J. H. Patrick** also vacationed in Alabama and in Mississippi. **J. P. Dillard** went over to North Carolina for his week of vacation.

Helen Burkhalter, of Plant Records, had her Marine husband, Max, from Cherry Point, N. C., home over the holiday week end.

. . . **Reva Dagny** and her husband, George, with **Bobbye Jean Jesse** and her husband, Don, planned an out-door camping trip to Norris over the week end. . . . A welcome is extended to **Frances Boyd**, latest addition to the roster.

J. C. Thomason, of the Assay Laboratory, and family are visiting his folks in Louisiana on his two-week vacation.

H. W. Krouse, of the Fire Department, and his family visited his relatives in Arvon, Va., and Mrs. Krouse's folks in North Carolina, while vacationing last week.

. . . **W. O. Elam** and his family took off to the Smokies for a picnic outing on the Fourth.

Kay Collins, of Security, is in Annapolis, Md., vacationing this week. . . . **Nita Kirwan** and **Billy Jean Pickett**, of the Analytical Laboratory, with Nita's mother, aunt and uncle, are vacationing at Daytona Beach and Silver Springs, Fla., this week. . . . The department welcomes **Barbara Hopkins** to their roster.

Nancy Gasaway, of the Cafeteria plans to visit in Chattanooga while on two weeks of vacation.

Madeline Edmondson, of Insurance and Housing, is spending all her vacation week loafing around home in Knoxville. . . . **Betty Jo Butler** and her mother, **Meta**, of Wage Standards, spent the holiday week end in Camden, Tenn. . . . **Winnie Miller** visited friends in Kentucky over the week end.

Dorothy Tomkins, of Property, and her husband had as holiday guests his parents, Mr. and Mrs. P. C. Tomkins from Lincoln, Neb. They made a tour of Gatlinburg and the Smokies while here. . . . **Stanley Easley** spent the holidays at home in Centerville, Tenn. . . . **Sue Rueff** and her sister with **Robert McHargue**, of Health Physics, went to Indianapolis, Ind., to visit the Rueff girl's grandmother over the holiday week end. . . . **Ann McKnight** visited her mother in Chattanooga over the week end.

Edna Fine, of Plant Engineering, and **Louise Argo**, of the General Maintenance Offices, flew down to Hogansville, Ga., to visit Louise's sister over the week end.

Mineralogy Group Holds July Meeting Tonight

Y-12 members of the Oak Ridge Mineralogy Society are urged to attend the July meeting of the club tonight at 8 o'clock in the ORINS Building on Administration Road.

Robert A. Laurence, of the U.S. Geological Survey in Knoxville, will be guest speaker for the evening. He will talk on barite and fluorite deposits in Tennessee and will discuss other critical defense minerals.

The report on the new gem-cutting group organizational meeting held last week will be given at tonight's meeting.

A nice place to figure the cost of accidents is in the hospital.

Contracts



GOODMAN - WORTHY

Miss Joy Ann Worthy, daughter of Mrs. Era Worthy of Memphis, and Mr. James Barnett Goodman, son of Mr. and Mrs. J. J. Goodman, Y-12 Cafeteria, and Oak Ridge, were married Sunday, June 15, 1952, at the Union Avenue Methodist Church of Memphis. Dr. Wayne A. Lamb, pastor of the church, performed the ceremony before an altar banked with white gladioli, greenery and candles. A program of nuptial music was provided by Mr. James Gregg, pianist, Mrs. James Gregg, violinist, and Mrs. Frazier Stafford, vocalist.

Miss Worthy was given in marriage by her brother, Mr. W. R. Worthy, of Pittsburg, Tenn. She wore a street length dress of aqua, taffeta shantung with matching shoes and veil. Carrying a white prayer book topped with a white orchid.

Mrs. Paul Worthy, sister-in-law of the bride, was matron of honor. She wore a street length dress of golden silk shantung with matching accessories and carried a bouquet of white daisies.

Mr. J. J. Goodman, father of the groom, was best man and the ushers were John Worthy, Jerry Worthy and Paul Worthy, all of Memphis, Tenn.

Following the ceremony a reception was given at the home of Mr. and Mrs. Frazier Stafford, after which the couple went to Jamaica for a week's honeymoon and returned to Oak Ridge to visit with Mr. Goodman's parents until he returns to Dental School at Memphis, where the couple will reside.

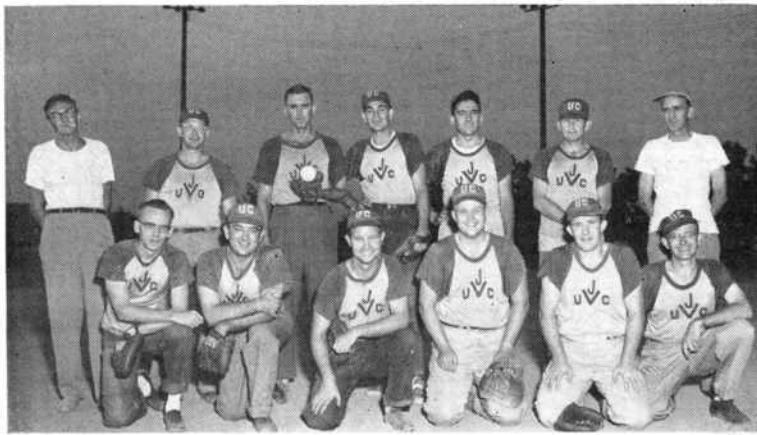
Out-of-town guests were Mr. and Mrs. Jim Thorpe, and daughter, Pat, of Oak Ridge; Mr. and Mrs. E. C. Sharp and daughter, Joan, Tullahoma, Tenn.; Mrs. William Goodman, New Albany, Miss.; Mr. Thomas Boswell, New Albany, Miss.; Mrs. W. T. Barnett, grandmother of the groom, Columbus, Miss.; and Mrs. Haggard, Columbus, Miss.

The bride attended Memphis State College, Siena College for Girls, and Memphis Academy of Art.

Mr. Goodman attended the University of Tennessee, Knoxville, and the University of Tennessee College of Dentistry, Memphis, where he is now a senior.

GOING ON VACATION?

Know where you're going? Need information? For your convenience the Recreation Office has set up a travel stand in Building 9704-2, just across the hall from the Time Office. This service is new and growing, so if you don't find what you want contact the Recreation Office in Building 9701-1. Telephone 7753 and ask for further information. If they don't have it they will obtain it for you. Of course this should be done in advance to give the Recreation Office time to secure the information needed.



U. C. J. V. OUT IN FRONT—They lead the Carbide League with nine wins and just three reverses. Front row, left to right: Charles Brooks, Wendell DeMarcus, Bill Blevins, Clyde Hopkins, Joe Syrl, and R. D. Smith. Back row: Fred Uffelman, John Thompson, Edgar Hopper, Charles Williams, Bob Ormes, John Lay, and W. W. Combs. The team has no manager but two assistant managers. They are Fred Uffelman and Al Bissell (the latter was not present when the pix was taken).



DEM BUMS IN SECOND PLACE—The team took over the Carbide League's runner-up spot as the result of piling up seven wins against only three losses. Front row, left to right: Jess Hamon, W. C. Anderson, L. E. Sikes, John Shugart, and Fred Kappelmann. Back row: Jim Adams, E. P. Braden, C. M. Smith, Bill Cottrell, Bill Dodson and F. G. Killion.

Season's First Swim Party Set for Tomorrow Night

Y-12 SPORTS NEWS

9212 Wins Over 49ers; UCJV Takes Carbide Loop Top Spot

With the help of 9212, who edged the 49ers by the narrow score of 3-2, the U. C. J. V. outfit grabbed top billing after winning three straight games. The 49ers defeat dropped them into third slot, one game behind the Bums.

The 9212 win over the 49ers was paced by Marlar who got a single and triple off Sise and scored two of the three runs. Fielder and Ellis each got a single to account for the only hits given up by Biery.

Dem Bums were dumped by the Peon team. Don Ross led his team in the win with four-hit pitching and two-hit batting. The H-P boys took over the lead in the last of the fourth and held it to win.

In other games, the 9212 team lost to the U. C. J. V. aggregation in a close battle. Williams led the U. C. J. V. team, two homers for three times at bat. Having played 500 ball before meeting the 49ers, the Duds bowed to the hurling of Sise, who allowed five hits. G. Fielder led the 49ers with two doubles. Another defeat was handed the Duds by the U. C. J. V. team, who made a merry go round out of the infield and giving up only one run to their opponents. In their only game of the week, the Hobslurps won over their cellar mates, the Sparks, by the close score of 2-0. Catcher Sangren led them with a triple for three times at bat.

Line scores and standing through last Friday follows:

Teams	R	H	E
Bums	201	000	0-3 4 1
Peons	002	300	x-5 5 0
Killian and Dodson. Ross and Gaillmore.			
9212	200	020	1-5 8 1
UCJV	000	402	x-6 7 3
Biery and Shotts. Hopper and Hopkins.			
49ers	101	330	5-13 12 4
Duds	001	000	1-2 5 1
Sise and Ellis. Fowler and Carlton.			
Hobslurps	100	100	-2 2 1
Sparks	000	000	-0 1 1
Kasten and Walker. Whited and Everett.			
49ers	011	000	0-2 2 4
9212	101	001	x-3 3 3
Sise and Ellis. Biery and Shotts.			
Duds	001	000	0-1 7 11
UCJV	552	020	x-14 12 4
Law and Carlton. Hodder and Hopkins.			

CARBIDE LEAGUE STANDINGS (Through July 3)

Teams	W	L
UCJV	9	3
Bums	7	3
49ers	6	3
Peons	6	4
9212	5	5
Duds	5	6
Hobslurps	3	7
Sparks	0	10

Varsity Softies Can't Play Ball Because Of Soft Grounds

Only one varsity game played last week because of the short holiday week and also (thanks) rain.

The Y-12 boys came through with a win in the only game played. Bobby Loy pitched two-hit ball to give the Red Birds a three to zero win over Mascot last Monday night. Gene Huskinson with two doubles, Jack Addison, a two bagger, and Morgan's single accounted for Y-12's hits.

Teams	R	H	E
Mascot	000	000	0-0 3 0
Y-12	000	201	x-3 4 1
Wagner and R. Moreland. Loy and Morgan.			

SCHEDULE

Friday, July 11—Piggies-Red Birds, 9:00 p. m., Middletown.

Y-12 Robins journey to Knoxville, for a game with Gus Green.

Saturday, July 12—Harriman boys and girls will be in Oak Ridge for two games with Y-12 boys and girls, 7:30 p. m., first game at Middletown.

Monday, July 14—Y-12 boys in Knoxville, for a game with Southern Bell.

Tuesday, July 15—Y-12 girls play Parkmor in Knoxville.

Free to Employees Of Y-12, Families

The Recreation Department has announced that the first Y-12 swim party of the season will be held tomorrow night at the Oak Ridge pool starting at 8:15 o'clock. The swim get-together is for Y-12 employees and their families.

Admission is free and the only requirement at the gate is the employee's presentation of Plant badge for identification purposes. A lot of fun contests are being planned which include competition for children as well as for the adults. In addition there will be special entertainment for the kids.

Although only one swim party was held last year of the several planned, the one party was a huge success as everyone who attended had a good time. Bad weather prevented additional swim parties being staged last year.

Carbide Trims Eastman

The Carbide checker team of Oak Ridge defeated the Tennessee Eastman checker pushers of Kingston, 260 to 240 last week at Oak Ridge. It was Carbide's second win over the T-E boys.

FOR CARBIDE				
Player	W	L	Pts.	
Moon	4	2	4	60
Miller	1	5	4	30
Whitson	4	2	4	60
Newsome	3	0	7	65
Defenderfer	2	3	5	45

FOR EASTMAN				
Player	W	L	Pts.	
Shipley	3	5	2	40
Housley	3	3	4	50
Goolsby	3	1	6	60
McConnel	3	1	8	50
Kirby	2	4	4	40

stories of the old days before the park was established. Beck and I have a standing date to show me what "stick bait" is next time it is in season.

J. C. Ezell, E. W. Pipes, H. D. Cofer and others fished those mountain fastnesses above Fontana Lake on the Memorial Day weekend, with Ezell staying over for a week's vacation. He cured a bear of camp-robbing by tossing a nice, loud firecracker under its middle as it inspected the cooking utensils. It leaped about twenty feet, then dragged its hindquarters about twenty-five yards before it could get its hind feet to working. After that it set a new speed record down the mountain and never came back.

Y-12's "Old Colonel" E. R. East-erday has been kept busy admiring the other fellow's fish lately (I won't say he's been content to admire them though) since he won so many prizes in the spring rodeo. He still presides over the luncheon table in 9709 where the loudest and wildest arguments about fishing take place 12 months in the year. Also some of the craziest bets you ever heard of, like all the bystanders being treated to ice cream before either of the bettors catch a fish.

Well, I don't know just what Marc expected this time, but I've worn out all the tall tales on the radio the past year. I haven't had the time to get much news this season outside of 9709 and 9737. I've taken E. E. Johnson, of P&E, out a couple of times but he can't seem to get the combination. Kasperrek always outfishes me.

So I guess I'll close by telling about George Ferrell's biggest catch of the season. That was the day he fished Nelson Tibbatts out of Loudoun Lake. Nelson and another Y-12er whose name I never learned got caught in a squall one Saturday and George came to the rescue. A couple of others, line-men W. H. Poole and M. C. Gore, managed to turn their boat over on a calm lake down on Watts Bar one weekend. With all their tackle on the bottom and the boat upside down, one called out to the other, "I've got the bait." They won't admit which one it was.

And that's the 'hole truth.'

Plant Loops Schedule

Wednesday, July 9—All Thumbs vs Rusty 9, at 5:45; 9212 vs Peons, 7:15. 49ers vs Sparks, 9:45.

Thursday, July 10—Hobslurps vs Duds, 5:45. UCJV vs Bums, 7:15. In Carbide first half.

Friday, July 11—All Thumbs vs Engineers, 5:45. Grocers vs Guards, 7:15. Short Circuits vs Rusty 9 at 8:45.

Monday, July 14—Grocers vs Rusty 9, 5:45. Short Circuits vs All Thumbs, 7:15. Engineers vs Guards, 8:45. In Carbon League first half. Rained out games to determine winners in each league will be played at the end of the first half.

Orioles Won 6 Out Of 7 in First Half

Manager Elmore Koon's slow pitchers finished the first half of league play last Wednesday night with a decided win over ORINS.

The Y-12ers pounded out 30 hits to account for 27 runs while holding this blue and white ORINS to seven runs off 10 hits.

The heavy sticks for Y-12 were Bill Koons and Jim Kile, both with five hits for six times at bat. Agee banged out four hits in five attempts. Anderson pitched to Holtz-knecht for the win.

The Orioles play Hospital tonight in the first game of the second half.

AEC won the first half with seven wins and no losses.

Teams	R	H	E
Y-12	324	643	5-27 30 2
ORINS	320	001	1-7 10 5

Inter-Company Match Set

The second Inter - Company Tournament for the 1952 season will be held at the Oak Ridge Golf and Country Club, Sunday, July 13, 1:00 p. m.

The Y-12 team will be shooting at a tie breaking score which now exists between them and the Independents.

Rec Loop Resumes Thurs.

In order to accomodate players who desired to start their long week end early, the Recreation

Rusty Nines Upset CarbonLoopLeading Engineers, 10 to 9

Taking an early lead over their departmental buddies, the Rusty 9ers edged past the Engineers in the last of the eighth inning. At the top of the seventh, the Engineers tied the score and it wasn't until the last of the eighth that the tie was broken. Agree, first baseman for the Rusty 9, managed to score the winning run by advancing on the bases by a theft and a passed ball.

Rain was the victor in the Grocer-Short Circuit tilt and also of the All Thumbs-Guard game on July 1.

Thursday, July 3, every team in the Carbon League got the opportunity to flex their muscles and as a result, the Grocers trounced the All Thumbs, 23 to 7. The Guards whipped the Rusty 9, 19 to 12, and the Engineers lucked out over the Short Circuits, 13 to 12.

Teams	R	H	E
Engineers	212	110	20-9 7 2
Rusty 9	320	310	01-10 11 3
Koons and Morris. Burnett and True.			

Grocers	289	071	-23 22 1
All Thumbs	001	024	-7 10 10
Doff and Duckworth. Surck and Haggard.			

Rusty 9	604	011	-12 10 10
Guards	543	07x	-19 15 2
Burnett and Lawson. Hammer and Hunicutt.			

Short Circuits	0	0	1	4
Engineers	3	0	0	10
O'Neal and Reece. McAllister and Morris.				

CARBON LEAGUE STANDINGS (Through July 3)

Teams	W	L
Engineers	9	2
Guards	7	4
Rusty 9	6	5
Grocers	5	5
All Thumbs	3	7
Short Circuits	1	8

League games for last Thursday were cancelled. Second half play will start tomorrow with the league-leading Y-12 Woodpeckers taking on UTARP at 9 o'clock, Midtown ball park.

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Permit No. 3**Carbide Produces
Chemicals by Coal
Hydrogenation**

Continued from Page 1

see in the future the end of cheap natural gas and petroleum. Moreover, if the country must sometime depend on synthetic liquid fuels, the engineering advances made by Carbide can be applied to the production of gasoline and diesel fuel by coal hydrogenation.

But, of most importance is the immediate future, where the coal-hydrogenation process gives promise of brighter days ahead for the hundreds of industries whose production is dependent upon coal chemicals—the plastics, rubber, dyestuff, perfume, paint, and synthetic detergents industries, to name a few.

In the Carbide process coal is crushed to about the size of wheat grains and mixed with recycled oil (recovered from a later stage of the process). The gritty mixture is then pumped into the hydrogenator. Gaseous hydrogen is introduced. The temperature is raised to somewhere between 450 and 550 degrees Centigrade and the pressure to 600 pounds per square inch. The coal and hydrogen react to form a liquid product. From here on, the job is one of separating the products of the reaction.

Chemicals Are Vaporized

The mixture then goes to a "hot separator" where the pressure is reduced to vaporize the sought-after chemicals. The chemical vapor stream is then condensed in a "cold" separator and the mixture of condensed chemicals is broken into three principal fractions: hydrocarbons, phenols, and nitrogen compounds. Each of these three is broken down still further into individual chemicals and useable chemical mixtures.

The remaining gases are collected and used. The hydrogen is recycled to the process; the other gases are separated and used as fuel, raw materials in chemical manufacture, or sold as bottled gas.

The heavy liquids stream, remaining after vaporization of the chemical products in the "hot separator," is treated to remove the ash and unreacted coal, then distilled into the recycled oil, which goes back into the hydrogenation process; and a residual oil ultimately to be made into coke.

Some of the chemical products to be expected from this revolutionary process are phenol, cresols, aniline, quinoline, naphthalene and toluene. With the great reservoir of coal resources in the United States, the chemical consuming industries can be assured of dependable future supplies of coal chemicals made by this process.

Continued operation of the new Carbide plant will provide many improvements to be incorporated in larger, more economical plants yet to be built. The plant now will provide coal chemicals for sales development work; operating and engineering experience for future plants with improved designs; and commercial amounts of raw materials for new chemical products. Practical coal hydrogenation for the production of chemicals will rank as one of the major contributions in this century.

**Y-12 Plant League Golfers
Begin Second Half Play**

All 11 teams will begin shooting at the Fat Boys (winners of first half) this week when the second and final round of the Y-12 Plant Golf League gets under way. In games this week the Shankers go against the Turf Riders, Four Hundreds ripping at the Rippers, Rough Riders and Eagles, Hooks vs. Grand Slammers, Rebels vs. Fat Boys and Four Woods vs. 9212.

The Plant Tournament is being scheduled for August 2, 3, and 9-10.

**News Stories On Coal-Hydrogenation Work
Printed In Nation's Top Papers, Magazines**

News stories on Carbide's coal-hydrogenation process have been appearing in some of the country's leading newspapers and periodicals. Most of these were written by editors who attended a preview and press conference at the plant. All the stories hailed the pioneering work that Carbide has done in the new field.

Sidney B. Self, writing in the Wall Street Journal, said: "A new chemical plant of a kind never built before has started running here. It is taking powdered coal, plus hydrogen gas at high pressure, and turning out a score of chemicals, some old but scarce, some new and rare."

Declared "Startling Development"

"Leading scientists believe that it may well prove to be one of the most startling developments in American chemistry since the same firm first made synthetic alcohol and Prestone 25 years ago. This laid the foundations for the multi-billion dollar petro-chemical industry of today, which turns oil and natural gas into the constituents for everything from tires to textiles. . . . The new plant is important because it points the way to a change in the whole economics of the chemical industry."

In the New York Herald Tribune, Max Forester wrote, "Coal hydrogenation became an established industrial operation, expected to result in a vast outpouring of new and useful chemical products, for the first time in the United States today."

Unit Described As "King-Sized"

"The surprise unveiling of a huge new pilot plant operation took place with the completion of six weeks of continuous operation for the king-sized unit which is actually processing coal at the rate of 300 tons a day."

Dwight Moody, in the Journal Of Commerce, had similar things to say: "Experiments have been successfully completed here that promise to bring revolutionary changes in the production, and use, of chemicals."

"What has been achieved here for the first time in history is a process through which, on a sound economic basis, chemicals can be produced on a commercial scale, directly from coal."

Industry Aware Of Interest

The May 10 issue of Chemical Week pointed out, "For some time, industry has been aware of Carbide's interest in the project. . . . Few, however, realized either the process that has already been made or the scope of future plans."

A six-page feature story on Carbide's process was carried in the May 12 issue of Chemical And Engineering News. In addition, however, its main editorial was inspired by the announcement of the process. Taking as its text, "Research Pays Dividends," it said:

"The unveiling of the 300-ton-a-day plant at Institute . . . in our opinion marks another major chemical and technological advance in the history of the American chemical industry."

President Dial Is Quoted

All the stories traced the history of the research, development, and operation of the process and indicated some of the uses that are being made and can be made with the coal-hydrogenation chemicals. Time Magazine concluded its story with:

**Rides Wanted
And Offered**

Wanted: To participate in car pool; or **Ride Wanted:** From Kingston, straight days. Josephine Gower, plant telephone 7389, home phone 6139.

Ride Wanted: From Powell, rotating shift, Group No. 2. David Price, plant telephone 7376.

Ride Wanted: From W. Fairview, Oak Ridge, straight days. Daisy Ward, home telephone 5-6036.

**SATURDAY EVENING POST
CARRYING COAL STORY**

The production of chemicals from coal is the subject of a feature article in the July 12 issue of Saturday Evening Post. The article was written by Arthur W. Baum, the Post's Associate Editor and its leading writer on scientific and industrial subjects. It is based on several visits Baum made to the coal mining operations as well as to the pilot coal-hydrogenation plant of Carbide and Carbon Chemicals Company at Institute, W. Va. Watch for this issue on the newsstands July 9.

"UCC President Dial . . . is not worried by the fact that not even his own chemical engineers know what new products may come from hydrogenation. They had the same problem when they produced chemicals from petroleum gases which had no known use, but which now sell in quantities totaling more than two billion pounds a year, and go into everything from an antifreeze (ethylene glycol) to cigarettes, aspirin and synthetic Vitamin B₁₂. More than a third of Carbide's earnings (\$104,000,000 in 1951) comes from products and processes that did not even exist in 1939. Among them were the process for making butadiene from alcohol which provided 90 percent of all U. S. World War II synthetic rubber; synthetic gems which outshine the original; and polyethylene plastics whose uses range from radar insulation to flexible bottles. 'Research,' says Morse Dial, whose company has spent upwards of \$100 million on it in five years and will spend \$30 million more this year, 'is our lifeblood.'"

**Y-12ers In Group
Organizing Rocket
Society In Ridge**

About 25 rocket enthusiasts in Oak Ridge and Knoxville, including three from the ANP Division in Y-12, perfected a tentative organization last week at a meeting in which plans were made to affiliate with the American Rocket Society.

A steering committee of seven was formed to formulate plans for the affiliation and future of the local group. The committee is composed of R. G. Affel, R. W. Busard and A. B. Longyear, all of the ANP Division in Y-12; W. P. Berggren, Oak Ridge National Laboratory; William Leach, Oak Ridge businessman; and W. P. Hogan and Thomas W. Scott, of the University of Tennessee, Knoxville. Longyear is a representative of the Aero Jet Engineering Corporation.

The group has tentatively set July 28 for its next meeting, when efforts will be made to show some movies on recent rocket launching and jet firing.

**Telephonic Conversations
'Scrambled' By Invention**

Future historians may refer to this era as the "Scramble Age," according to the National Patent Council. There have been scrambled corporations, scrambled television and scrambled politics. Now comes a new method for scrambling a telephone conversation that has been invented and patented by John C. Steinberg, Short Hills, N. J. It is simple to operate. A message is dictated on a record and the record is played into a telephone. The funny sound it makes defies all eavesdropping. At the other end of the line the message is received on a record. The recipient adjusts the record to the proper code and hears the message as it was originally dictated. The invention has been assigned to the Bell Telephone Laboratories.

Your One Vote is Important

More times than you think, a single vote decides an election. One vote elected a President of the United States.

One vote made Texas part of this country; one vote admitted California, Idaho, Washington and Oregon to the Union.

One vote has decided hundreds and perhaps thousands of issues—some even more important to the people of a given community than who's President of the U. S.

Repeatedly, one vote has shaped history.

Some 50 million Americans know their votes are important. But almost as many others who could vote haven't yet realized that each vote counts—and sometimes tips the scales—in an election. Bad officials, it's said, are elected by the good men and women who could, BUT DON'T, vote.

If you're good at remembering election results, you can probably recall an instance in your own experience where one vote or perhaps a few votes decided the outcome. Maybe it involved a new school, election of more efficient local officials, or selection of the man to represent you in the state legislature or in Congress. Did you vote in that election? Might your vote have been decisive?

There are dramatic examples of elections which went one way or the other because of a single individual's vote. Rutherford B. Hayes became President by a one-vote margin over Samuel Tilden. And the man on the electoral commission who cast the deciding vote had himself been elected by a single vote—cast by a desperately ill citizen who insisted on being taken to the polls to vote!

In DeKalb County, Indiana, back in the 1840's, a miller was persuaded to take time out of a busy day to vote. He voted for a candidate for the state legislature—who won by just one vote. Later this legislator cast the deciding vote that sent Edward Hannegan to the United States Senate. Not long after, Senator Hannegan cast the decisive ballot that admitted Texas to the Union. Indirectly, the humble miller's vote determined a major event in history.

There are literally dozens of similar instances. John Adams was elected President over Thomas Jefferson by three electoral votes. Aaron Burr, later charged with treason, missed being President by one electoral vote, and in his stead Thomas Jefferson—with whom he was tied in the electoral vote—was named by the House of Representatives.

More recently, one vote in the House of Representatives made the Draft Act of World War II the law of the land and caused millions of men to be called for service in the Armed Forces. Only four years ago, in Ohio, one person voting in each of the state's 8,800 election

districts could have changed Ohio's vote for President, and possibly altered national and international developments of the past four years.

These are things to remember when you are tempted to think that, with so many people voting, YOUR one vote can't mean very much. In a very large percentage of elections, a relatively small number of voters can tip the balance in favor of good government. **One vote is important.**



DALE HOLLOW LAKE IS rapidly being utilized by Y-12 fishermen with good results, as is evidenced by this fine catch by Gene Kirk, of the Y-12 Cafeteria.



L. E. MAXWELL, RIGHT, OF the Y-12 Guard Department, and his fishing companion, Gene Castleberry, of Management Services, landed this fine batch of about 80 crappie recently near the Caney Creek boat dock on Watts Bar Lake.



DEE-LICH-OUS, WERE THE legs of these 40 odd frogs giggered by Howard Adcock, of the Automotive Maintenance Shops, left, and B. N. "Buzz" Strunk, of Stores, at Norris recently. Their wives went along and caught their share of the bag.

'MANIAC' DEVELOPED

The Associated Press has quoted scientists at the University of California at the Los Alamos Scientific Laboratory as announcing successful operation of a fabulous electronic "brain" called the "Maniac." Designers of the gadget say the machine can work 100,000 times as fast as a trained computer using a desk calculating machine.